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ABSTRACT

A method for promoting oral hygiene and treating a patient for gingivitis, other periodontal problems or oral mal odor by transmitting to the gums of a patient electrical current wave forms of electrical voltage within the range of from about $\pm 0.3V$ to about $\pm 3.9V$ as a combination of ultra-weak electrical currents that are comprised of a combination of multiple types of current wave forms made up of alternating current square-waves of differing patterns, such that there is applied to the gums a low electrical current of $500\mu A$ or less in order to promote oral hygiene and provide treatment of the patient for the effects of gingivitis, other –periodontal problems and oral mal odor, and a device suitable for providing a method for promoting oral hygiene and treating a patient for gingivitis, other –periodontal problems and oral mal odor, the device comprises an electrical output device and a pair of disposable electrical conductive, flexible pad elements for electrical connection to said electrical output device and suitably designed for insertion into the oral cavity of a patient, the pair of flexible pad elements containing an electrical conductive amount of an electrical conductive material such that the electrical resistance of the electrical conductive flexible pad elements is $1\text{ k}\Omega$ or less and whereby electrical current wave forms similar to the biological electrical currents that occur in the human body are adapted to provide an electrical effect to the gums of the patient by contacting the gums with the flexible pad elements that conduct electricity from the electrical output device through the flexible pad elements to the gums of the patient, and wherein said electrical control device is adapted to repeatedly output an electrical voltage within the range of from about $\pm 0.3V$ to about $\pm 3.9V$ to said flexible elements as a combination of ultra-weak electrical currents that are comprised of a combination of multiple types of current wave forms made up of alternating current square-waves of differing patterns, such that when said flexible elements come into contact with the gums of the patient, the flexible elements pass through and apply to the gums a low electrical current of $500\mu A$ or less.